

# **SAFETY**

in the  
Science  
Classroom



# **Safety and Rules of the Lab**



# Lab Safety Rules

- Part of this PowerPoint has been taken from the power point of....  
Tim Baker, Adam Kuelczo, and Todd Katz....former NCHS students
- And from Lyndon B. Johnson High School Science Web Site



# Safety Symbols



- Know safety symbols
- They appear in your laboratory activities
- They will alert you to possible dangers
- They will remind you to work carefully



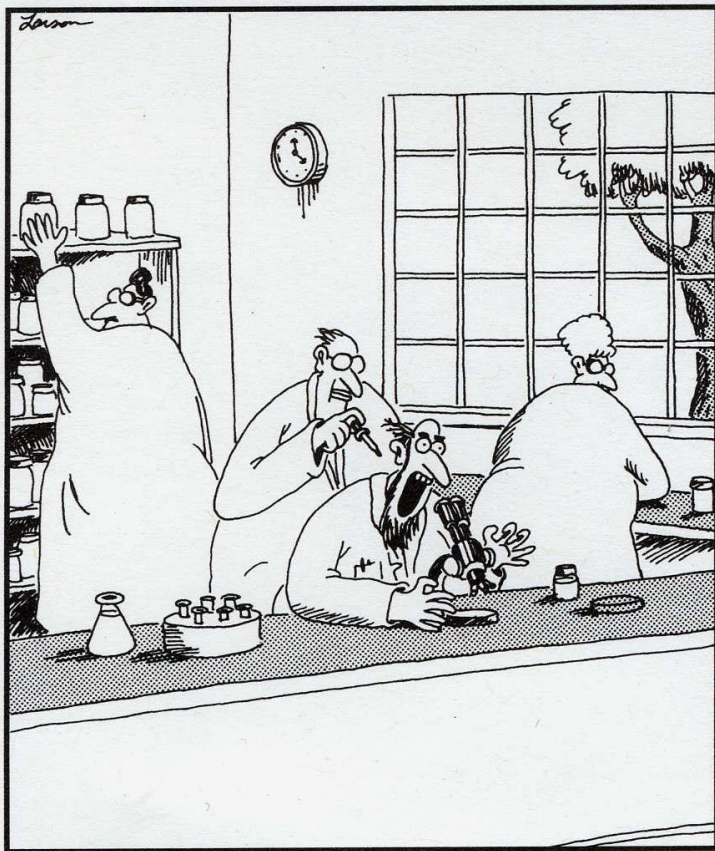


General danger

# Use Your Head



Poison



Professor Glickman, the lab practical joker, deftly places a single drop of hydrochloric acid on the back of Professor Bingham's neck.

- Exercise Caution and Good Judgment
- Follow all instructions given by the teacher
- Notify the teacher immediately regarding any accident or unsafe areas





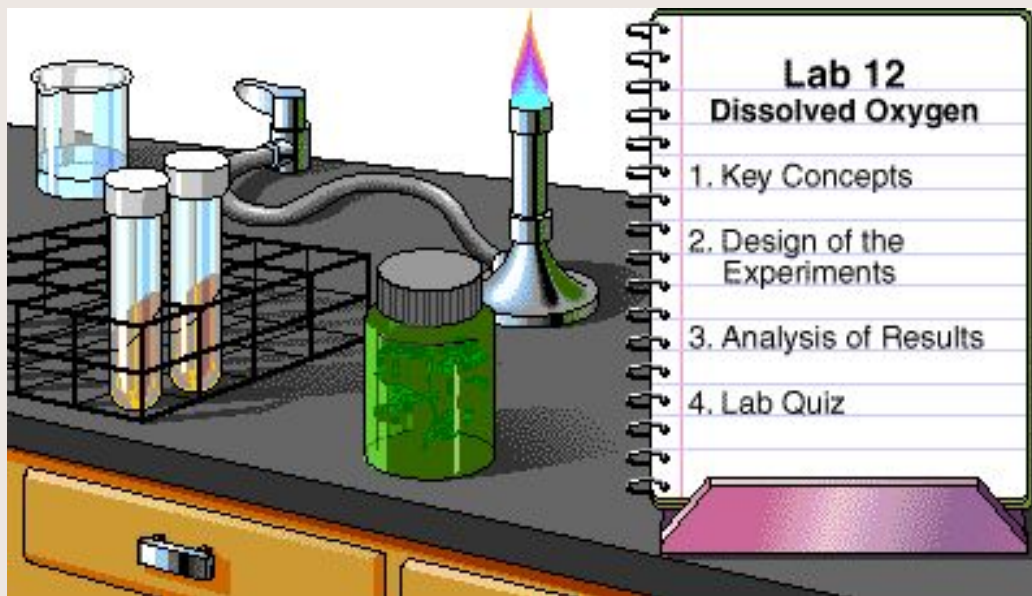
General danger

# Use Your Head



Poison

- Read lab instructions ahead of time
- Always follow lab procedures exactly
- Never do an unauthorized experiment





# Protect Yourself Eye Safety



- Wear safety goggles when working with chemicals, flames, or heating devices
- or if possibility of flying debris



- If you wear contact lenses let your teacher know





# Protect Yourself Eye Safety

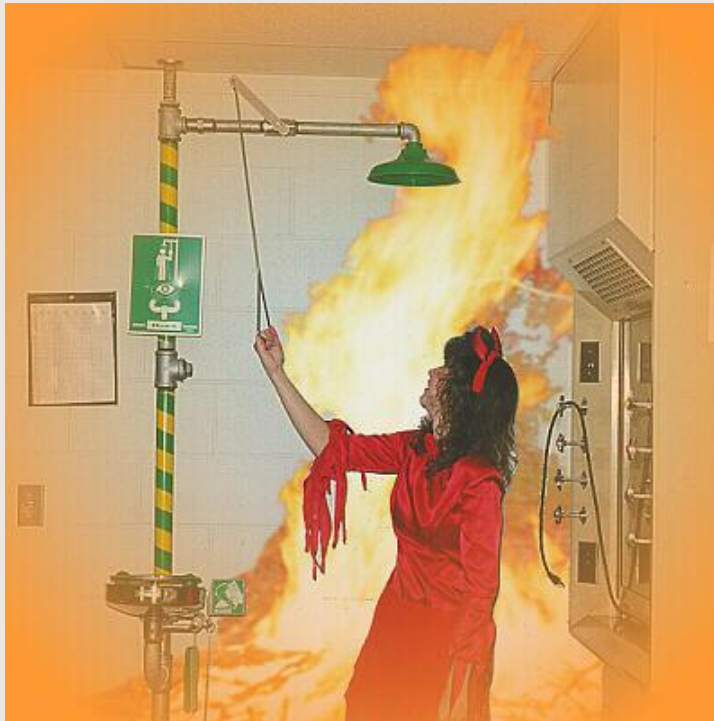


- In case of emergency in which a chemical goes into one's eye, use the eyewash station





# Protect Yourself Proper Attire

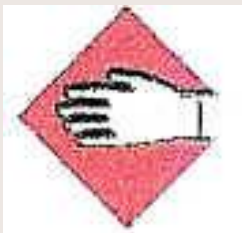


- Foot wear that completely covers the foot is required

- Keep all long hair tied back
- Do not wear loose clothing that could catch on fire







# Protect Yourself Hand Safety

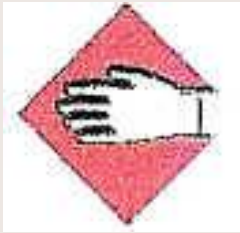


- If a chemical spills on your skin, notify the teacher and rinse with water for 15 minutes
- Wash hands after every lab



- Handle glassware, sharp tools and heated containers carefully





# Protect Yourself Hand Safety



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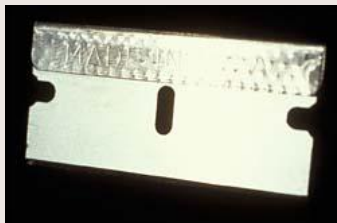
"They hate it when you carry the testtubes that way."



# Sharp Objects



- Always cut away from fingers and body
- Always carry sharp objects with points and tips facing down and away
- Never try to catch falling sharp instruments
- Grasp sharp instruments only by the handles



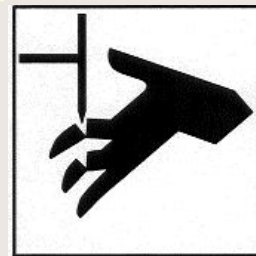




# Sharp Objects

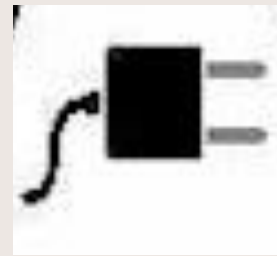


- Notify teacher if you get cut
- Broken glass and sharp objects do not go in trash cans
- Teacher will clean up broken glass





# Electrical Safety

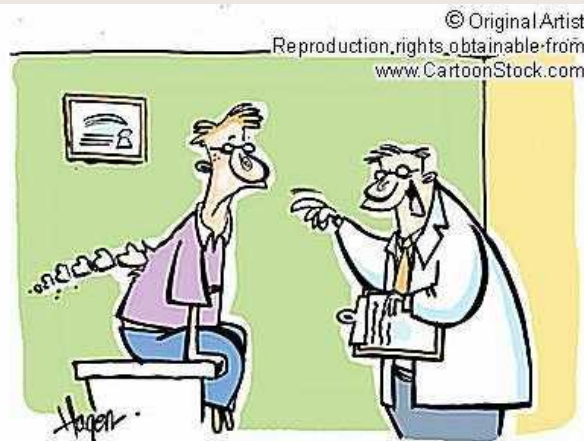


- Only electrical plugs are to be placed into an electrical outlet
- Unplug electrical equipment after use
- Keep all electrical cords, wires, and appliances away from water





# Physical Safety

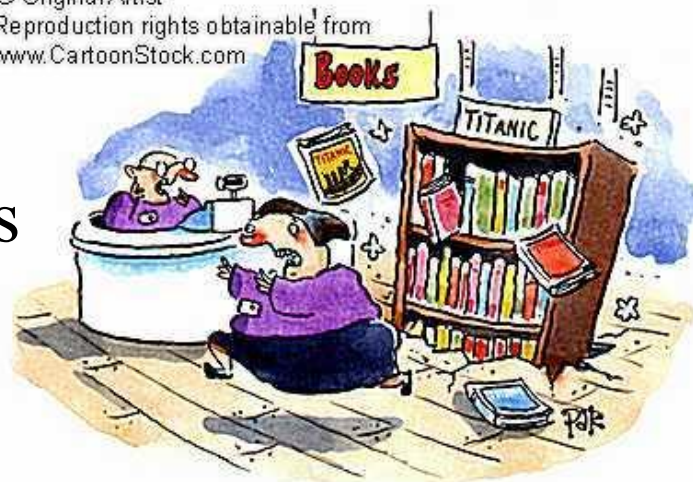


UH, UH, UH, YOU WEREN'T LIFTING WITH YOUR LEGS WERE YOU?!

- Handle all equipment carefully
- Do not place a cord where someone can trip over it
- Push all stools in out of the way

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- Keep books picked up out of walking isles



"She's going down!"





# Heating Safety



- Tie back hair and loose clothes when working with open flames
- Never look into a container as you are heating it
- Never point the end of a test tube being heated at yourself or others



- Never heat in a closed container





# Heating Safety



- Never leave a heat source unattended
- Heated metal and glass looks cool, use tongs or gloves before handling
- Do not place hot glassware directly on lab desk or in cold water





# Chemical Safety



- Read all labels twice before removing a chemical from the container



- Only use the type and amount of chemical instructed to use
- Never touch, taste, or smell a chemical unless instructed by the teacher
- Never mix chemicals unless instructed to do so





# Chemical Safety



- Transfer chemicals carefully!
- Keep lids on chemical containers when not in use
- When diluting an acid, pour the acid into water
- Consider **all** chemicals dangerous



Corrosive



Radioactive



Biohazard



Poison



Oxidizing



Explosive



Flammable

# Animal Safety



- Only handle living organisms with teacher permission
- Always treat living organisms humanely
- Wash your hands after handling animals



# Treatment of Specimen



- Respect the life of all laboratory specimen



- They gave their life for your education





# Plant Safety



- Do not eat any plants in lab
- Wash your hands after handling plants
- Tell your teacher of any plant allergies



- Like any organism, plants should be considered possibly harmful



General danger

# You Should Never...



General danger

- Enter store room unless given permission
- Take any chemicals from lab or store room
- Touch any equipment, chemicals, or other materials until instructed to do so







# You Should Never...

- Eat or drink in the lab
- Use lab glass-ware to eat or drink out of







General danger

# You Should Never...



General danger

- Engage in....
  - practical jokes
  - horse play
  - rough house



The favourite practical joke amongst  
Big Bang theorists.



# In case of an emergency...



- Know the locations of:
  - fire extinguisher
  - fire blanket
  - body shower
  - eyewash station
  - first aid kit



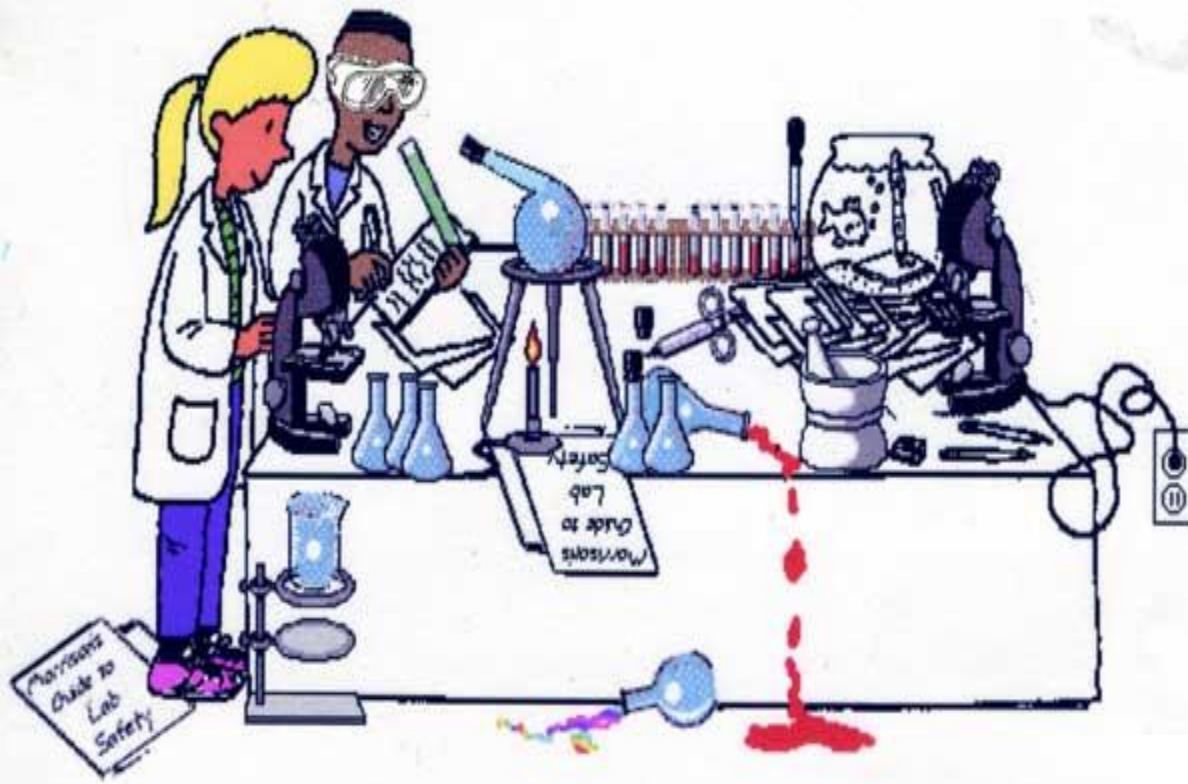
- If you spill a harmful chemical on yourself or in your eyes, start rinsing immediately and send your partner to get teacher's help

# Remember to...



- Stay at your work station
- Maintain a clean work area
- Read and follow all directions
- Report any spills, accidents, or injury to the teacher immediately
- Clean and put away all equipment at the end of the lab period
- Dispose of waste products according to instruction





So Do It Right!

